

AMENDMENT TO THE SPECIFICATION

Please replace the paragraph beginning on page 8 line 1 and ending on page 8, line 16 as follows.

Merge fingers or spreaders 270 are supported relative to a merge tool 280 at merge station 106-3 as shown in FIGS. 1-2. The merge tool 280 as shown in detail in FIGS. 10-1 through 10-4 is compliantly (relative to six degrees of freedom) supported by a lift assembly 282 to raise and lower the merge tool 280 relative to the data storage device or workpiece for merge operations. The merge tool 280 includes nest balls 284 and pins 286, which extend from legs 290 coupled to a merge plate 292 of the merge tool 280. In a lower merged position of the merge tool 280, the nest balls 284 seat in ball pads ~~296~~287 on the assembly nest as shown in FIG. 3 to provide elevational alignment or planarity for the merge tool 280 relative to the assembly nest. Pins 286 (only one visible in FIG. 10-1) are aligned for insertion into datum sockets 166, 168 as previously illustrated in FIG. 3 to orient or self align the compliantly supported merge tool 280 relative to the assembly nest and the workpiece. The merge tool 280 includes displacement sensors 294 on legs 290 for alignment of the merge tool 280 and sensor block 296 to provide position feedback (e.g. disc height or placement of the discs to align the merge fingers 270 relative to discs) for operation of the merge tool.

Please replace the paragraph beginning on page 14, line 17 and ending on page 15, line 5 as follows.

As previously described, suspension and latch cam fingers 222, 244 are actuated to locate the positioning or clocking arm 174 and head suspension assemblies for merge operations. Following actuation of the suspension and latch cam fingers 222, 244, the machine vision system measures position of the positioning or clocking arm 174 and the head suspension assembly (e.g. center or rotation axis) to provide a premerge alignment check (Vision Check II) as illustrated by block ~~286~~386. Following merge operations, the machine vision system uses a feedback image to verify absence or presence of the comb to verify comb removal (Vision check III) as illustrated

by block 388. The comb check looks for a circular darkened area on a white background portion of the image to verify that the comb 250 has been removed. The vision system also measures the merged head suspension assembly position or angle for merge operation alignment control. In one embodiment, the machine vision system measures a read/write connector position for the data storage device. The machine vision system can be adapted or reprogrammed for different workpieces or devices to provide desired operation control.

Please replace the paragraph beginning on page 15, line 7 and ending on page 15, line 20 as follows.

The assembly can be used for demerge operation to remove previously assembled head suspension assemblies as illustrated in FIG. 14. For demerge operations, the merge head 298 as is rotated to preposition the yoke pins 308 relative to the merged actuator or E- block 252 (e.g. proximate to yoke arms of a voice coil motor) as illustrated by block 390. Thereafter, the yoke cam 322 is actuated to lock the yoke portion 304 of the merge head 298, as illustrated by block 392, and the fingers or spreader 270 are retracted and the merge tool 280 is lowered as illustrated by block 394. Thereafter the merge fingers or spreaders 270 are rotated via rotation of spindle 316 or merge head 298 as illustrated by block 396 to engage the merged head suspension assemblies. Thereafter the yoke cam 322 is released and the merge fingers or spreaders 270 and merge head 298 rotate to demerge the head suspension assembly or assemblies and remove the merge fingers 270 from the head suspension assemblies as illustrated by block 398. The merge head and tool 280 are raised to remove the merge head and tool from the workpiece or data storage device.